## Deer expert predicts strong deer harvest

The effects of this year's hemorrhagic disease outbreak might not become evident for several years. Deer and hunter numbers remain strong in Missouri.

**JEFFERSON CITY**—How will this year's historic drought and higher-than-normal incidence of hemorrhagic diseases affect Missouri's deer harvest? The answer, according to the Missouri Department Conservation (MDC), is "Not much. At least not this year."

MDC Resource Scientist Jason Sumners says factors affecting deer harvest include the size of the deer herd and the availability of acorns. This year's historic drought is expected to affect both of these factors.

"Hot, dry weather can have direct negative effects on deer," says Resource Scientist Lonnie Sumners. "Drought forces them to work harder to find food and water, and extreme heat is hard on deer, just like it is on people. But the most important effects of the summer heat wave will be indirect."

According to Sumners, drought forces deer into closer contact around reduced water sources. That creates perfect conditions for the spread of hemorrhagic diseases, which are caused to by two closely related viruses, the blue tongue virus and the epizootic hemorrhagic disease virus. Outbreaks of these viral diseases tend to be worse in drought years, and this year was no exception.

"Some deer die from hemorrhagic disease every year, but this year's outbreak was worse than most," says Sumners.

Hemorrhagic diseases are unrelated to chronic wasting disease (CWD), which currently is limited to Linn and Macon counties. Hemorrhagic diseases are no danger to humans. Outbreaks end with a frost hard enough to kill the flies that spread the disease.

MDC has a map at <a href="www.mdc.mo.gov/node/16479">www.mdc.mo.gov/node/16479</a> showing the number of reported cases of hemorrhagic disease by county. Counties hardest hit included Osage, with 290 cases reported as of Oct. 25, Chariton with 261, Benton with 229, Monroe and Boone with 177 each, and Shelby with 169.

"Those numbers don't give a complete picture of how many deer actually died in a particular county," says Sumners. "Most cases go unreported. But they give you an idea of where the diseases are most prevalent."

Even in those counties most affected by hemorrhagic diseases, Sumners says the effects are patchy and highly localized.

"You can lose 50 percent of the deer in a small area and practically none a few miles away in the same county," he says. "You really have to look at your particular area. If you see fewer deer than usual this year, you should adjust your harvest accordingly."

Despite possible decreases in local deer populations, Sumners says he does not expect a decrease in this year's state-wide deer harvest. He says this is partly due to another indirect effect of weather.

Drought reduces the supply of acorns produced by oak trees. Each summer MDC conducts an annual survey to estimate the size of the acorn crop, because acorns are the dietary mainstay of many wildlife species, including white-tailed deer and turkeys. This year's acorn crop is the smallest on record. Sumners says a poor acorn crop means a bigger deer harvest in the Ozarks.

"Forest covers a much larger percentage of the landscape in southern Missouri," said Sumners. "As a result, the availability of acorns plays a much larger role in determining whitetails' feeding behavior in the Ozarks than it does in the rest of the state. When acorns are scarce, deer are much more concentrated around a few productive trees and around food plots and the agricultural crops. This makes it much easier for hunters to find them."

The annual acorn survey gathers separate figures for acorn production by trees in the white- and red-oak groups. Trees in the white-oak group, which have rounded leaves, set and bear fruit the same year. In contrast, red oaks, which have pointy leaves, produce nuts the year after setting fruit. Acorns that began growing on red oaks last year are just maturing now.

Adequate rainfall in 2011 and this year's warm, early spring gave red oaks a significant nut-producing advantage over white oaks this year. This shows up in the fact that red oaks' acorn production exceeded that of white oaks in every region surveyed. This is a significant fact for Ozarks-region deer hunters, who will want to focus their hunting efforts around red oak trees.

This year's deer harvest in the Ozarks also will be affected by acorn production in 2010 and 2011. Good crops in those years allowed deer to find food without moving much, which made them harder for hunters to find. Two years of modest deer harvests allowed deer numbers to increase in the Ozarks, so hunters will have easier access to more deer in many parts of southern Missouri.

"Any local reductions in deer harvest due to hemorrhagic disease are likely to be offset by a very strong deer harvest in the Ozarks," says Sumners.

Sumners said declines in deer population in localities with high incidences of hemorrhagic disease don't always cause immediate decreases in deer harvest. Instead, harvest decreases usually trail population declines by two or three years.

"Hunters might see fewer deer in years when we have serious hemorrhagic disease outbreaks," says Sumners, "but they typically still see enough deer to shoot approximately the same number they did the year before. That delays the harvest decline, but it just means a bigger decrease a year or two down the road."

The difficulty of measuring losses to hemorrhagic disease makes it impossible to predict local population impacts. MDC can reduce the number of antlerless permits available to allow deer populations to rebuild in affected counties when declining trends become apparent. However, hunters and landowners can react more quickly by sparing does as soon as they notice a decrease in local deer numbers.

The November portion of 2012-2013 firearms deer season runs from Nov. 10 through 20 this year. Sumners reminds hunters that some deer-hunting regulations have changed this year to help contain CWD. Those changes include the following items.

• Lifting the four-point rule in the CWD Containment Zone consisting of Adair, Chariton, Linn, Macon, Randolph, and Sullivan counties. Allowing the harvest of young antlered deer in this area will help slow the spread of the disease, which affects members of the deer family, but not people or livestock.

- Prohibiting the use of salt, minerals or other deer consumable attractants in the CWD Containment Zone.
- Encouraging hunters who kill deer in the CWD Containment Zone to process deer there.
  This will avoid moving the portions of deer carcasses most likely to carry CWD to other areas.
- Asking hunters who shoot deer in the CWD Containment Zone to allow MDC to take tissue samples for CWD testing. Removing the samples is free and quick.
- Providing five special CWD seals to each of 80 landowners in the core CWD area in Macon and Linn counties, allowing them to harvest additional deer in an effort limit the spread of CWD.

Another major change in this year's deer regulations is aimed at offering hunters more opportunities during what formerly was known as the muzzleloader portion of the firearms season. This portion, which runs from Dec. 15 through 25, now is known as the alternative-methods portion of firearms deer season. During this portion hunters can use muzzle-loading firearms, longbows, crossbows, atlatls, center-fire pistols or revolvers, or air-powered guns.

Details about other regulation changes and about MDC's CWD-containment strategy are available in the 2012 Fall Deer and Turkey Hunting Regulation guide, which is available wherever hunting permits are sold and online at mdc.mo.gov/node/3656.

-Jim Low-

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